



CONSULTANT INFORMATION SYSTEM (CIS)

TECHNICAL STATEMENT OF WORK

Prepared By: Cathy Kovich
Information Services Division

Publication Date: 01/2008 (revised from 10/2007)

Table of Contents

PROJECT OVERVIEW	1
PROJECT SCOPE	1
IN SCOPE	1
OUT OF SCOPE	3
DELIVERABLES	4
PROJECT ESTIMATED EFFORT/COST/DURATION	5
PROJECT ASSUMPTIONS	6
RISKS.....	7
RELATED DOCUMENTS	9
BUSINESS/FUNCTIONAL REQUIREMENTS/MATRIX.....	9
CHANGE ORDER PROCESSING.....	9
PROJECT ROLES / PROJECT STANDARDS.....	9
PROJECT APPROVALS.....	10

Project Overview

The purpose of this project is to provide a central automated system for the Consultant Design Bureau (CDB) to monitor and administer work performed by external consultant firms for this department (MDT).

Project Scope

The scope of the work will involve:

- 1) Administering contracts with external consultant firms
- 2) Maintaining consultants firms working for MDT
- 3) Accessing project information at a phase (agreement) level
- 4) Streamlining the review and approval of consultant file submittals
- 5) Eliminating direct access to the file submittal vault (CSDVault)
- 6) Providing reliable history
- 7) Providing access controls to the CIS application to CDB

In Scope

The first phase of the project will provide user interfaces for:

- 1) Maintaining contract information
 - a. Original agreed upon and awarded
 - b. Tracking invoice submittals and payments
 - c. Making term assignments
 - d. Making sub-consultant assignments
 - e. Adding amendments
 - f. Supplemental assignments
 - g. Amendments
 - h. Projects assignments
 - i. Audits
 - j. Error/Omissions
- 2) Maintaining consultant information
 - a. Offices
 - b. Employee contacts
 - c. Overhead rates
 - d. Pre-qualification rankings
- 3) Access to project information
- 4) Maintaining Document Submittals and Information
- 5) Handling document transfers from the staging area to DMS
- 6) Maintaining CIS controls
- 7) Maintaining validation lists

Interfaces will provide both default search and user-defined (advanced) search capabilities. The latter provides a flexible method for users to dynamically define the desired results. Default report for all query result screens will be provided.

Additional reports identified by CDB at this time:

- Project List
- Consultant List
- Validate Reference Documents
- Validate DMS documents against CSDVault documents (latest)

Automated e-mail notifications will be distributed for all instances identified during the design. These are dependent on the distribution lists maintained by CDB.

Multiple phases of a project can be attached to a contract, meaning the same project number and different, units, agreements or phases.

Approved documents will automatically be moved to DMS without a user having to create in and/or have WRITE access to the project on DMS. Verifications will include checking for existence of the document on DMS, if changes have been made between the documents (size and modify date), all referenced files exist and have been approved as well.

Validation of submitted invoices will be verified against contract rules identified during the design. Invoice approvals and payments (Highway On-Line Claims number) will be captured. This invoice information can be used to validate the accounting system.

This is an Intranet application. Web standards dated September 2005 will be followed except for the ones documented and agreed upon between the CIS IT Team and MDT ISD Systems. Application standards will developed during this effort.

CDB will continue to manually obtain files submitted by consultants and store them for CIS access (staging area). Once there this system will handle document transfers.

Loading legacy data will be done for any contracts CDB identifies and associated data in support of those contracts. CDB will identify and provide all information via guidance by the IT staff. Historical data will be considered as a second phase to this project.

Out of Scope

This project will not include processes for awarding contracts to consultants.

This project will not provide a method for consultant to submit their files using MDT's computer network. This project will not include electronic transfer of documents to the staging area.

This project will not include attaching multiple projects (different 4-5 PPMS project number) to a contract.

This project will not provide project information maintenance. This functionality will continue to be done via PPMS.

Processing invoice payments will not be provided via CIS. An interface to the HOC (Highway On-line Claims) will not be part of this project.

Internet browsers other than IE 6.0 or greater will not be supported.

The following have been mentioned or are covered under other submitted work requests, but will not be covered as part of this project.

- This project will not provide the consultant pre-qualification and ranking process.
- This project will not include consultant performance or work proposal evaluations.
- This project will not provide archive and restore document capabilities.
- Reports not already identified by the time of this document approval, will be considered under a different work request.

Deliverables

The CDB administers approximately 120 contracts per year. Consultant pay offs in 2003 was approximately \$30,000,000,000.00 per year. In 2007 it is approximately \$16,000,000,000.00. CIS will meet the following business goals.

- Reduce overruns.
- Lower error and omission rates.
- Insure all hard copy, signed contracts are obtained.
- Decrease labor hours managing contracts and supporting information.
- Streamline document transfers submittals, reviews and approvals).
- Insure document submittals are reviewed in a timely manner.

Deliverables provided:

- Centrally managed application for consultant contracts and document submittals.
- Integration capabilities with other MDT systems retaining data in the Oracle database.
- Elimination of stand-alone tracking systems currently used (ex. spreadsheets).
- Handle documents transfers once stored on the staging area and keep interested parties informed of document status.
- Initial User Manuals
- On-Line Help
- Initial training

Project Estimated Effort/Cost/Duration

IT resources:

Cathy Kovich, Project Lead
 Jenean Spencer, Lead Analyst
 Maureen Culpon, Prototype Design
 Sasha Harlow, Developer
 Riley Phelps, Developer

Milestones	Estimated Hours	Estimated Cost	Sub/Grand Totals	
Project				
Project Approval Documents (Technical Scope of Work, Requirements, Project Plan, etc.)	4.00	\$164.04		
IT Overhead	801.50	\$34,157.93	\$34,321.97	
Design				
Design Change II DB and Requirements Changes	0.00	\$0.00		Completed
Design Change II Prototype Changes	66.00	\$2,812.76		
Prototype Design	624.00	\$26,593.32		
Reports Design	108.00	\$4,602.69	\$34,008.77	
Development				
Design Change II Database	0.00	\$0.00		Completed
Data Loads	306.00	\$13,040.96		
Working Prototype	8328.00	\$354,918.54		
Reports	65.00	\$2,770.14		
Workflow	280.00	\$17,360.00	\$388,089.63	
Testing	288.00	\$12,273.84	\$12,273.84	
Implementation	120.00	\$5,114.10	\$5,114.10	
Close-Out	64.00	\$2,727.52	\$2,727.52	
Total Effort		11,054.50	\$476,535.82	

Starting Date/Holidays	Days to Complete	Completion Date
07/30/07	467	09/08/08

*Approximate average wage (used on 90% of tasks).

This plan contains only what is left to accomplish on the CIS and includes hours for IT resources only. For details see [CIS-RevisedPlan](#).

Project Assumptions

In order to identify and estimate the required tasks and timing for the project, certain assumptions and premises need to be made. Based on the current knowledge, the project assumptions are listed below. If an assumption is invalidated at a later date, the activities and estimates in the project plan will be adjusted accordingly.

- The technical staff will work on this as their high priority project.
- The technical staff will implement the best solution for the design.
- There will be a minimum of three technical staff dedicated to this project.
- The authorizer and sponsor will insure business users provide time and feedback when necessary.
- The authorizer and sponsor will roll out the implementation and process changes to the rest of the department.
- CDB will bring persons up to speed in the event there is a change in current project roles (authorizer, sponsor, business users).
- CDB will use this application and only this application for maintaining components within, once implemented.
- Technical staff's skill sets vary and education time is acceptable.
- Venturing in a new environment (java) is acceptable.
- Interactive User Experience (IUX) methodologies are being introduced after 95% of the initial analysis and design has been completed. This is accepted by the authorizer and sponsor.
- True IUX cannot be evaluated or measured for this project because of its late introduction.

Risks

Risks are characteristics, circumstances or features of the work environment that may have an adverse affect on the work or the quality of its deliverables. Known risks are included below. A plan will be put into place to minimize or eliminate the impact of each risk.

Risk Area	Impact (H/M/L)	Probability (H/M/L)	Risk Plan
Schedule Flaw	H	M	Exercise appropriate rigor in sizing and estimating tasks. Closely monitor estimates vs. actuals.
Requirements Inflation	H	M	Follow the established Change Order process to assess requested changes, determine their impact and obtain management decision on how to proceed.
Turnover	H	M	Bring everyone up to speed both on business and IT sides. After implementation, provide cross-training on critical operations.
Specification Breakdown	H	M	Ensure all parties sign off on data definitions, inputs and outputs and functions to be performed.
Inadequate User Involvement	H	M	Ensure users are committed and respond promptly to requests for information and verification of test results.
Under-Performance	M	L	Identify required skill levels and obtain commitment of needed resources.
Team Communication	M	L	Formalize communication between all team members. Ensure proper versions of documents are shared with all team members.

CIS

Risk Area	Impact (H/M/L)	Probability (H/M/L)	Risk Plan
Workflow Upgrade	M	M	An upgrade of the database is scheduled sometime in 2008. This may require an upgrade to workflow, which would impact this project.
Document Transfer Program Rewrite	H	M	An upgrade of the VMS operating system may result in retiring the current transfer program and implementing a new one.
Application Server Upgrade to 10.1.2 or greater.	L	H	CIS is being designed and developed with 10.1.2 capabilities and the current department applications servers are an older version.

Related Documents

The following documents provide supporting details.

Business/Functional Requirements/Matrix

Business requirements: [CIS-BUSINESS-REQUIREMENTS.](#)

Functional requirements: [CIS-FUNCTIONAL-REQUIREMENTS](#)

Requirements matrix: [CIS-REQUIREMENT-TRACEABILITY-MATRIX.DOC](#)

Change Order Processing

Process flow diagram: [Change-Order-Process-Diagram](#)

Process description: [Change-Order-Process](#)

Project Change Request Form: [Change-Request-Form-Template](#)

Project Roles / Project Standards

[Project-Roles](#)

[Project-Standards](#)


Project Approvals

The following agree to this Technical Scope of Work and give approval to proceed with the finishing of the design prototype and development of the application per the current data requirements and processes identified.


Bryan Vieth, Requestor 1/18/08
Date


Tim Conway, Authorizer 1/18/08
Date


Ken Varnado, IT Manager 18-Jan-08
Date


Cathy Kovich, Project Lead 1/18/08
Date